Applicant: William Harold Jay

Serial No.: 09/509,301 Filed: March 23, 2000

Page : 4 of 5

Attorney's Docket No.:11750-002001 / 2274032 / PO9462 / 97- MJC

REMARKS

Applicant has amended claims 1 and 6 to more particularly point out and distinctly claim the subject matter. Support for the amendment can be found at, e.g., page 7, lines 16-19. No new matter has been introduced by the amendment.

Claims 1-12 are currently pending. Reconsideration of the application, as amended, is respectfully requested in view of the remarks below.

Rejection under 35 U.S.C. § 112, 2nd paragraph

The Examiner rejected claims 1-12 as being indefinite for failing to particularly point out and distinctly claim the subject matter for which patent protection is sought. See the Office Action, page 2, lines 8-9. Specifically, the Examiner pointed out that "the distinction ... between the Lawson disclosure and the invention of at least claims 1 and 6, lies in a reasonably precise understanding of the distinction between a 'superabsorbent' polyurethane foam and other polyurethane foam materials that are not fairly characterized as 'superabsorbent'." See the Office Action, page 2, lines 9-13.

By amending claims 1 and 6, Applicant has limited all of the pending claims to a <u>water</u> superabsorbent polyurethane, which is distinguishable from an <u>organic solvent</u> absorbing polyurethane disclosed by Lawson. Also see the discussion, *infra*. Applicant submits that this rejection has been overcome by the above amendment.

Rejection under 35 U.S.C. § 102(b)

The Examiner rejected claims 1-12 as being anticipated by Lawson et al., WO 94/00237 ("Lawson"). See the Office Action, page 2, lines 1-2.

Independent claim 1 will be discussed first. Claim 1, as amended, covers an ion exchange material that includes two components: (1) a <u>water</u> superabsorbent polyurethane foam, and (2) an ion exchange medium in the <u>water</u> superabsorbent polyurethane foam. The superabsorbent polyurethane foam is capable of absorbing a large amount of <u>water</u>. The ion exchange properties of the ion exchange material are introduced by embedding an ion exchange

Applicant: William Harold Jay

Serial No.: 09/509,301 Filed

: March 23, 2000

Page

: 5 of 5

Attorney's Docket No.:11/50-002001 / 2274032 / PO9462 / 97- MJC

medium into the water superabsorbent polyurethane foam. See the Specification, page 2, lines 17-18.

The Examiner pointed out that "Lawson describes a material comprising an ion exchange material dispersed or distributed within a polyurethane polymer" and "the polyurethane polymer maybe swollen by toluene (page 7, line 36)." See the Office Action, page 2, lines 3-5. Lawson further discloses at page 7, line 36 that a polyurethane interpenetrating polymer maybe swollen in toluene to facilitate the modification reactions on a dispersed phase polymer. Such modification reactions provide the dispersed phase polymer with desired ion exchange properties. See the Specification, page 3, lines 31 to page 4, line 1; and page 6, lines 24-32. Thus, Lawson discloses at most an organic solvent superabsorbent polyurethane, not a water superabsorbent polyurethane polymer as required by amended claim 1. Thus, claim 1 is not anticipated by Lawson. Claims 2-5 and 7-12, dependent from claim 1, are also not anticipated by Lawson.

Amended claim 6 covers a process of extracting metal ions from solutions or slurries by using an ion exchange material that includes a water superabsorbent polyurethane. As discussed above, Lawson does not teach a water superabsorbent polyurethane. Thus, for the same reason, claim 6 is also not anticipated by Lawson.

CONCLUSION

For the reasons stated above, Applicant submits that the grounds for the rejections asserted by the Examiner have been overcome, and that claims 1-12, as pending, define subject matter that is definite and novel over the prior art. On this basis, it is submitted that all claims are now in condition for allowance, an action of which is requested.